

CLAIMS

1. A urological guidewire, comprising:
  - a core formed of a first metallic material and extending toward an end of the guidewire;
  - a coil including a plurality of convolutions extending around the core at the end of the guidewire, the coil being formed of a second metallic material different than the first metallic material; and
  - a mechanical interlock formed between the coil and the core to inhibit separation of the coil from the core.
2. The urological guidewire recited in Claim 1 wherein the core has a distal end with a diameter and a mechanical interlock, comprising:
  - an enlargement having a fixed relationship with the end of the core and having a lateral dimension greater than the diameter of the core at the distal end of the core; and
  - a bonding material fixing the enlargement to the coil to mechanically bond the core to the coil.
3. The urological guidewire recited in Claim 2, wherein the enlargement is formed integral with the core and comprises a hook formed at the distal end of the core.
4. The urological guidewire recited in Claim 2, further comprising:
  - a penultimate convolution included among the plurality of convolutions, the penultimate convolution having a first radius of curvature; and
  - an ultimate convolution included among the plurality of convolutions, the ultimate convolution having a second radius of curvature less than the first radius of curvature to form a bridge across the penultimate convolution.
5. The urological guidewire recited in Claim 4 wherein the mechanical interlock comprises:
  - portions of the core extending at least partially around the bridge of the ultimate convolution to mechanically interlock the core and the coil of the guidewire.

6. The urological guidewire recited in Claim 5 wherein the portions of the core include at least one revolution of the core extending around the bridge of the coil.

7. The urological guidewire recited in Claim 6, wherein:  
the distal end of the core is bent back on itself; and  
the distal end of the core is attached to itself to fix the distal end of the core around the bridge of the coil.

8. A method for manufacturing a guidewire having a core and a coil spiraled in a plurality of convolutions around the core, comprising the steps of:  
forming the core of a first metallic material;  
forming the coil of a second metallic material different than the first metallic  
5 material; and  
mechanically interlocking the coil and the core.

9. The method recited in Claim 8 wherein the mechanical interlocking step includes the steps of:  
providing an enlargement; and  
mechanically bonding the enlargement to the coil.

10. The method recited in Claim 9 wherein the bonding step includes the steps of:  
bonding the enlargement to the coil by one of welding, soldering, and adhering the enlargement to the coil.

11. The method recited in Claim 8 further comprising the steps of:  
providing the coil with a convolution forming a bridge; and  
during the mechanical interlocking step, bending the core over the bridge.

12. The method recited in Claim 11 wherein the bending step includes the step of bending the core in at least one revolution around the bridge.

13. The method recited in Claim 12 further comprising the step of:  
after the bending step, fixing the core to itself.

14. The urological guidewire, comprising:  
a distal section having a first flexibility, a first lubricity, and a first length;  
a central section having a second flexibility, a second lubricity, and a  
second length;  
5 a proximate section having a third flexibility, a third lubricity, and a third length;  
the third flexibility being greater than the second flexibility and less than the  
first flexibility;  
the second lubricity and the third lubricity being less than the first lubricity; and  
the first length being greater than the third length and less than the second length.

15. The urological guidewire, comprising:  
a core formed of a first metallic material and extending toward an end to the  
guidewire;  
a coil including a plurality of convolutions extending around the core at the distal  
5 end of the guidewire, the coil being formed of a second metallic material different than the first  
metallic material; and  
a mechanical interlock formed between the coil and the core to inhibit separation  
of the coil from the core.